## Psychopharmacology for the Clinician Psychopharmacologie pratique

To submit questions for this regular feature, please send them to the Journal of Psychiatry & Neuroscience / Revue de psychiatrie & de neuroscience, Canadian Medical Association, 1867 Alta Vista Dr., Ottawa ON K1G 3Y6, Canada; fax 613 729-9545; jpn.office@sympatico.ca. Please include details of any relevant case and your name, address, telephone and fax numbers as well as your email address.

## What are the diagnostic criteria, therapy and prophylaxis for discontinuation symptoms due to SSRIs?

To date, selective serotonin reuptake inhibitors (SSRIs) have been widely prescribed as therapeutic agents for mood and anxiety disorders. With the expansion of their clinical application, increasing attention is now being paid to discontinuation symptoms. These have been defined (Oliver et al, CNS Drugs 1999;12:171-7) as a collection of signs and symptoms temporally related to the cessation or dose reduction of a drug, in which there is a predictable onset, duration and offset; there are both psychologic and bodily symptoms; and the symptoms were not previously complained of by the patient.

The most common symptoms include dizziness, nausea and vomiting, fatigue, headache, gait instability, insomnia, electric shock-like sensations, and vivid dreams or nightmares.

The symptoms that emerge after discontinuation of SSRIs are also known to occur with tricyclic anti-depressants and serotonin norepinephrine reuptake inhibitors (e.g., venlafaxine).

Although no diagnostic criteria have been established for the symptoms that may emerge after discontinuation of SSRIs, Black et al (J Psychiatry Neurosci 2000;25: 255-61) have proposed the following criteria. Criterion A is discontinuation or reduction of the dose of an SSRI after at least 1 month of treatment. Criterion B is the development of 2 or more symptoms such as dizziness or shock-like sensations. Criterion C is the clinically significant nature of the symptoms. Criterion D is the inability to find any cause for the symptoms other than the discontinuation or reduction of the SSRI. Similar criteria have been reported by Haddad (J Psychopharmacology 1998;12:305-13).

The mechanism of onset of discontinuation symptoms has not been clarified. The long-term use of SSRIs is known to decrease the sensitivity of the serotonin autoreceptors or postsynaptic receptors, or to cause downregulation of these receptors. Therefore, it is generally accepted that abrupt discontinuation of SSRI treatment temporarily causes a relative depletion of serotonin in the synaptic cleft (Haddad). Cholinergic rebound theory has been implicated mainly in discontinuation symptoms with tricyclic antidepressants and paroxetine. There are no reports of discontinuation symptoms due to fluoxetine, which is an SSRI with a longer half-life. In the case of sertraline, another SSRI with a longer half-life, the incidence of discontinuation symptoms is low. It is thus thought that discontinuation symptoms do not occur unless the elimination of serotonin from the synapse occurs abruptly. SSRIs that cause discontinuation symptoms relatively easily are those with shorter half-lives, such as paroxetine and fluvoxamine.

Discontinuation symptoms that are mild in severity and bearable will disappear over several days without any treatment. If the symptoms are severe, readministration of the original treatment may be necessary.

The key points are the timing of discontinuation and the method of gradual dose reduction. If any discontinuation symptom occurs, the original treatment should be readministered, and the dose should then be reduced little by little over 1 month. If discontinuation symptoms persist with readministration of an SSRI with a short half-life, it should be replaced gradually by another SSRI with a long half-life. For prophylaxis, it is also important to reduce the dosage gradually, avoiding abrupt discontinuation of the treatment.

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Competing interests: None declared.

The information in this column is not intended as a definitive treatment strategy but as a suggested approach for clinicians treating patients with similar histories. Individual cases may vary and should be evaluated carefully before treatment is provided.